

Trip Report

Title: "Bark beetle and their management in Poland and Lithuania"

Team Members:

Steve Munson, M Sc.

Group Leader, Ogden FHP

USDA-Forest Service, 4746 S. 1900 E, Ogden, UT

Phone: (801) 476-9728, Fax: (801) 479-1477, Email: smunson@fs.fed.us

Dr José Negrón

Research Entomologist

Rocky Mountain Research Station

240 W. Prospect, Fort Collins, CO

Phone: 970.498.1252, Fax: 970.498.1010, Email: jnegrón@fs.fed.us

Dr Paulius Zolubas

Lithuanian Forest Research Institute

Forest Protection Laboratory

Girionys, Kaunas, Lithuania 4312

Email: apsauga@mi.lt

Dr Jacek Hilszczanski

Department of Forest Protection

Forest Research Institute

Ul. Bitwy Warszawskiej 1920 r. no.3, 00-973 Warsaw, Poland

Phone: 48 22 7150550, Email: Hilszczj@ibles.waw.pl

Countries Visited / Dates of Visit

Poland 22-28.08 and 31-5.09, Lithuania 28-31.08.

Summary:

The purpose of this trip was to visit various places in Poland and Lithuania to observe spruce bark beetle (*Ips typographus*) behavior and to visit with forest research entomologists and forest managers to discuss some of the problems and approaches to bark beetle management. The following individuals participated in these discussions:

Poland – Prof. Zbigniew Sierota, Dr Andrzej Kolk, Prof. Henryk Malinowski, Dr Lidia Sukovata, Zbigniew Boguslawski, Boguslaw Glinski, Olgierd Furman, Dr Bogdan Jaroszewicz, Jerzy Lugowoj, Prof. Jerzy Starzyk, Prof. Jacek Michalski, Dr Wojciech Grodzki, Roman Laton, Dr Pawel Skawinski

Lithuania - Prof. Albertas Vasiliasukas, Dr Stasys Mizaras, Dr Arturas Gedminas, Kestutis Sakunas, Saulius Sidabras, Stanislovas Vysniauskas.

During the trip Forest Research Institutes in Poland and Lithuania and several field sites with active bark beetle infestations and research plots were visited, which included:

- ◆ Forest Research Institute in Sekocin Las near Warsaw
- ◆ Biebrza National Park with spruce beetle infested plots
- ◆ Pine stands infested with pine shoot beetle in Rajgród State Forest District
- ◆ Wigierski National Park with infested stands in strict reserve and managed stands
- ◆ Spruce beetle infestations and managed forest in Suwalki State Forest District
- ◆ Old-growth semi natural stands of strict reserve with beetle infestation and bark beetle problems in Białowieża National Park
- ◆ Managed stands of Hajnówka State Forest District
- ◆ Ministry of Environment of Lithuania
- ◆ Lithuanian Forest Institute
- ◆ Dubrava Forest Enterprise with bark beetle infestations in commercial (managed) forests
- ◆ Zemaitija National Park with infested stands in strict reserve area
- ◆ Tatra National Park with spruce beetle infestation inside and outside strict reserves
- ◆ Managed spruce stands in Nowy Targ State Forest District

General Discussion:

Steve and Jose were requested to give a seminar at the Poland Forest Research Institute in Sekocin Las. Steve discussed forest health practices in his Region and Jose presented a summary on some of his current forest research projects. (Prof. Zbigniew Sierota, Prof. Henryk Malinowski, Dr Lidia Sukovata and other research staff attended the seminar). Steve also gave a presentation on forest health practices in his Region at the Lithuanian Forest Research Institute near Kaunas.

During the trip Steve and Jose and European colleagues visited the following sites that document some of the research and/or forest protection treatments designed to mitigate bark beetle effects in Poland and Lithuania.

- Research plots of Jacek Hilszczanski in pure spruce and mixed stands within Biebrza National Park. This site currently has a third generation infestation of spruce beetle
- Scots Pine stands in Rajgród State Forest District surrounding a chipboard factory with a huge log yard and adjacent Scots pine stands heavily infested with pine shoot beetle
- Strict reserve “Kamionka” and managed stands of Wigierski National Park. Discussed history of bark beetle infestations in the Park and treatments undertaken to mitigate spruce beetle effects with Deputy Director of the Park, Zbigniew Boguslawski.
- Discussed management issues and treatment objectives for spruce beetle in currently infested stands within the Suwalki State Forest District. Supervisory District inspector Olgierd Furman and forest protection officer Boguslaw Glinski representing Regional Directory of State Forests in Białystok led the discussion

- Overview of natural old-growth and younger mixed stands in Bialowieza National Park with ongoing infestation of spruce beetle. Discussed insect and disease management strategies used within a National Park and how these vary from State Forest practices with entomologist Dr. Bogdan Jaroszewicz Deputy Director of the Park
- Visited spruce stands in State Forest District Hajnówka to discuss bark beetle management issues in lowland forests of northeastern Poland with Forest District Supervisor Jerzy Lugowoj, Prof. Jerzy Starzyk, and Prof. Jacek Michalski
- Visited Ministry of Environment in Lithuania, where forest management and forest protection operations in US, Poland and Lithuania were discussed with Vice-Minister Prof. Albertas Vasilias
- Visited Lithuanian Forest Research Institute to present current research status in forest protection and research needs/priorities of the Institute with Dr. Stasys Mizaras, Deputy Director, and Dr. Arturas Gedminas, Head of Forest Protection and Game Management Department
- Visited Dubrava Forest Enterprise, where commercial forest management and protection activities within forests of different age classes were discussed and visited with Kestutis Sakunas, General Manager. Also visited bark beetle experimental plots in strict reserve
- Visited Zemaitija National Park, where forest, pest management and bark beetle caused mortality in protected areas were discussed with Saulius Sidabras, Deputy Director, and Stanislovas Vysniauskas, Chief Forester. Also visited bark beetle experimental plots in commercial forests
- Tatra National Park overview of spruce infestation in strict reserves. Visited with Dr. Pawel Skawinski National Park Director and Dr. Zbigniew Krzan Deputy Director of the Park and Dr. Wojciech Grodzki to discuss bark beetle management strategies in alpine and subalpine regions of Tatra Mountains in Poland
- Discussed management issues and treatment objectives in subalpine State Forest District, Nowy Targ with Roman Laton District Supervisor and Elzbieta Dyrz who is responsible for forest protection within the State Forest District

During Steve and Jose's visit, all project participants took part in IUFRO meeting "Ecology, Survey and Management of Forest Insects" in Kraków where many oral presentations and posters were presented on current bark beetle issues in Europe and North America. Project participants discussed preliminary results and associated outputs of our joint Project to ensure that the study will effectively address the needs of the resource specialists who will use the model. The field visits and group discussions were very supportive in addressing data analysis and data collection formats that will be used to develop a hazard/risk-rating program for *Ips typographus* in Poland.